## Patent Claims

- Heat-storage medium comprising ternary mixtures composed of water and two salts from the group consisting of lithium nitrate, sodium nitrate, magnesium nitrate, potassium nitrate, calcium nitrate and zinc nitrate.
  - Heat-storage medium according to Claim 1, characterised in that the proportion of the individual components in the mixtures is in the range 1-70% by weight.

10

- Heat-storage medium according to Claim 2, characterised in that the proportion of the individual components in the mixtures is in the range 7-58% by weight.
- 4. Heat-storage medium according to Claim 1, characterised in that the mixtures are composed of zinc nitrate/lithium nitrate/water, zinc nitrate/calcium nitrate/water, lithium nitrate/sodium nitrate/water or zinc nitrate/magnesium nitrate/water.
- 20 5. Heat-storage medium according to Claim 1, characterised in that the medium is encapsulated.
- 6. Process for the preparation of a medium according to Claim 1, characterised in that the mixtures of two compounds selected from the group consisting of lithium nitrate, sodium nitrate, magnesium nitrate, potassium nitrate, calcium nitrate and zinc nitrate or hydrates thereof and water are melted, where the proportion of the individual components in the mixture is in the range from 10 to 90 mol%, and optionally subsequently brought to crystallisation.
- 30 7. Use of a medium according to Claim 1, optionally together with auxiliaries, as storage medium in latent-heat storage systems.

- 8. Use of a medium according to Claim 1 for the thermostatting of buildings, in plaster or in or on Venetian blinds.
- 9. Use of a medium according to Claim 1 in air-conditioning units for motor
  vehicles, transport or storage facilities.
  - 10. Use of a medium according to Claim 1 in transparent thermal insulation systems.